IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

INVENTOR: Dan Kikinis

CASE: P5064

SERIAL NO.: 09/927,301   **GROUP ART UNIT:** 2665

FILED: 08/10/2001   **EXAMINER:** Philpott, Justin M.

SUBJECT: Integrating SIP Control Messaging into Existing Communication Center Routing Infrastructure

PARTY IN INTEREST: All inventions in the disclosure in the present case are assigned to or assignable to:

Genesys Telecommunications Laboratories, Inc.

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

APPEAL BRIEF

1.0   Real Party in Interest

The real parties in interest are the parties named above in the caption of the brief, Genesys Telecommunications Laboratories, Inc.

2.0   Related Appeals and Interferences

This is an appeal from the Office Action of the Primary Examiner dated 07/19/2005 Finally rejecting claims 16-27, the only pending claims in the application. A related Appeal of the claims in this case was filed by appellant on January 06, 2005.

3.0   Status of the Claims

Following is the status of all claims in the instant case:

Claims 1-15 Canceled

Claims 16-27 Rejected - appealed in this brief.

4.0   Status of Amendments

No amendments have been filed subsequent to the Final rejection of claims 16-27, the subjects of this appeal.

5.0   Summary of the Claimed Subject Matter

Following is a concise explanation of the subject matter defined in standing claims 16-27.

5.1 Independent system claim 16

16. A system for routing a communication event in a call center [figure 4, element 402, first described page 19, line 14] having routing provided by a CTI server [figure 4,

element 412, first described page 22, line 10], the event initiated by an originator [figure 4, element 419, first described page 20, line 17] at a computerized workstation outside the call center, comprising:

a software-enabled SIP mechanism [figure 4, elements 420, 421, first described page 23, lines 21-24] operable on the workstation by the originator to prepare and send an SIP-protocol routing request along with an event initiation; and

a software enabled reformatting mechanism [figure 4, elements 410, 411, first described page 23, lines 3-6] in the call center receiving and processing the SIP-protocol routing request;

characterized in that the reformatting mechanism converts the SIP routing request into non-SIP protocol understood by the CTI server, and sends the resulting non-SIP request to the CTI-server for processing and response, and the CTI server determines and returns a routing for the communication event.

In summary, in claim 16 a mechanism is provided for incorporating SIP protocol as a call management tool within a communication center, wherein SIP messaging capability is integrated with routing infrastructure, enabling the routing of both COST and IPNT communication events to available agents sharing a LAN within a communication center, wherein SIP protocols are used to set-up, manage, and terminate sessions between agents and clients of the center and between agents and other agents associated with the center according to established routing rules set-up for the center. The routing system comprises CTI, proxy and data servers, and a software suite, components of which cooperate to compute and serve routing determinations per request, initiate and manage routed and established session events, parse request data received under session initiation protocol (SIP), and convert the received data into a routing request using non-SIP protocol understood by the CTI server. The resulting non-SIP routing request is sent to the CTI server for processing and response, and the CTI server determines and returns a routing for the communication event.

5.2 Independent method claim 22

22. A method for routing a communication event in a call center [figure 4, element 402, first described page 19, line 14] having routing provided by a CTI server [figure 4, element 412, first described page 22, line 10], the event initiated by an originator [figure 4, element 419, first described page 20, line 17] at a computerized workstation outside the call center, comprising the steps of:

a) preparing and sending an SIP-protocol routing request [figure 5, step 501, first described page 26, line 5] along with the initiated event by a software-enabled SIP mechanism [figure 4, elements 420, 421, first described page 23, lines 21-24] operable on the workstation by the originator [figure 4, element 419, first described page 20, line 17];

b) receiving and processing the SIP-protocol routing request [figure 5, step 502, first described page 26, line 8] by a software enabled reformatting mechanism [figure 4, elements 420, 421, first described page 23, lines 21-24] in the call center;

c) converting the SIP routing request [figure 5, step 502, first described page 26, line 8] into non-SIP protocol understood by the CTI server by the reformatting mechanism;

d) sending the non-SIP request [figure 5, step 502, first described page 26, line 8] to the CTI-server for processing and response; and

e) determining a routing for the communication event [figure 5, step 507, first described page 27, line 1] by the CTI-server.

In summary, in claim 22 a method is provided for intelligent routing of a communication event incorporating SIP protocol as a call management tool within a communication center, wherein SIP messaging capability is integrated with routing infrastructure, and wherein SIP protocols are used to set-up, manage, and terminate sessions between agents and clients of the center and between agents and other agents associated with the center according to established routing rules set-up for the center. In this embodiment the method comprises the steps of preparing and sending an SIP-protocol routing request along with the communication event, receiving and processing the SIP-protocol routing request by a software enabled reformatting mechanism in the

call center, converting the SIP routing request into non-SIP protocol understood by a
CTI server operating in the communication center, sending the non-SIP request to the
CTI server for processing and response, and determining a routing for the
communication event by the CTI server.

Dependent claims 17-21 and 23-27 are also provided which recite that the
communication event arrives at the call center from a data packet network such as the
Internet, which is connected to a local area network (LAN) within the communication
center, and the CTI server controls the routing within the center, wherein the
communication events are received from clients of the center and routed to agents or
automated systems within the center.

6.   Grounds of Rejection to be Reviewed on Appeal

Claims 16-27 stand Finally rejected under 35 U.S.C. 103(a) as being unpatentable
over Draginich et al. (hereinafter Draginich) U.S. Patent No. 6,560,329.

7.   Argument

Because there is but one ground of rejection, as indicated above, there are no
separate subheadings under "Argument".

Appellant believes that the Examiner in this case has neglected to adequately
consider the claimed manner in which the system and method provide SIP messaging or
conversion of SIP protocol events to non-SIP events, and has therefore failed to make a
prima facie case for obviousness in the standing rejection.

The Examiner's Arguments:

In appellant's response filed August 08, 2003 in response to the first Office Action in the case mailed March 16, 2003, the Examiner presented the prior art of Schulzrinne in a prima facie rejection of appellant's claims, and appellant provided arguments that the reference failed to teach that an SIP request initiated by a caller is parsed in our call center, and then reformatted into language that is understood by the CTI-Server in the call center, which then makes routing decisions.

In this response appellant cancelled the standing claims as originally filed, and presented a new set of claims 16-27 reciting the patentable limitations of the claimed invention wherein the reformatting mechanism converts the SIP routing request into non-SIP protocol understood by the CTI server, and sends the non-SIP request to the CTI-server for processing and response, and the CTI server determines a routing for the communication event.

The new claims and arguments presented were persuasive to the Examiner and in the Office Action dated November 07, 2003 the Examiner withdrew the prior art from the previous action and presented the new art of Wengrovitz. Appellant provided arguments that the reference provided by the Examiner failed to teach a routing means provided by a CTI server, routing of events in a call center, or any intelligent routing at all.

Appellant was caused to file a Notice of Appeal on December 13, 2004 in response to the Office Action in the case dated October 04, 2004 which maintained the previous Final rejection of the claims over Wengrovitz. In response to that subsequent Appeal filed by appellant on January 06, 2005, the arguments presented to the Examiner were persuasive, and the Board subsequently reversed the Final rejection and reopened the case for continued prosecution, presenting the new art of Draginich, in another Final rejection of the claims in the Office Action dated February 24, 2005.

The Examiner's 103(a) rejection over Draginich:

Appellant provided arguments in the response filed on June 01, 2005, that Draginich failed to explicitly teach or suggest several aspects of the invention of the

present application, including the claimed limitations of having routing means provided by a CTI server, and a software-enabled SIP mechanism converting SIP messages to non-SIP messages, characterized in that the reformatting mechanism converts the SIP routing requests into the protocol understood by the CTI server.

In the Office action dated July 19, 2005, to which the present Appeal is in response, The Examiner has maintained the Final rejection of the claims over the art of Draginich, and has stated in his remarks that Draginich does indeed teach an alternative embodiment which utilizes SIP messaging, and maintains that while Draginich does not explicitly teach SIP to non-SIP conversion performed specifically the routing controller, such conversion is implicitly performed in either routing controller 20 or call server 22, since the call server 22 then communicates with different telephony protocols according to a protocol of a coupled PBX 42 or Centrex 102, both of which are coupled to the routing controller 20. The Examiner added that it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results, and it therefore would have been obvious to shift the location of the protocol conversion from the call server 22 to the routing controller 20, and the contention of obvious choice in design would be overcome if unexpected results could be established.

Appellant strongly traverses the Examiner's position however, because shifting the location of the protocol conversion from the call server to the routing controller certainly would produce unexpected results, and therefore does not merely constitute a design choice. The claimed invention of the present application teaches and claims routing the communication events through intelligence provided by a CTI server of the communications center, characterized in that the reformatting mechanism converts the SIP routing requests into the protocol understood by the CTI server. When a caller initiates an event a SIP message is sent concurrently through the Internet, and the CTI server of the claimed invention has software compatible with SIP protocol and converts SIP routing requests to a language or protocol understandable by the routing server for determining routing for the agent. The goal being the usage of telephony routing protocol intelligence uniformly to route any and all kinds of communication events, whether they be IPNT or COST telephone calls, e-mails, chat communications, or any other communication event typically handled by a communication center. This allows

for uniform application of routing rules which are built specifically for each and every type of telephony event, and intelligently routes all of these types of events. Further, it allows the set up of communication call centers to operate without the need for installation of new additional equipment, etc., by using the intelligence software of the CTI server and SIP messaging and conversion.

In the art of endeavor, call switches of different manufacture operate differently and utilize different software to perform their functions. By virtue of the functionality of the CTI server of the claimed invention, which is enhanced by proprietary software executing in the CTI server, the switch becomes a simple switch that does not require enhanced intelligence or capabilities not typically found in a standard call switch. The CTI server of the claimed invention always operates with another server of switch, monitors and controls the activities and functionality of the switch under certain conditions, and can be utilized to normalize an entire field of coupled switches by enabling any switch to perform as required, regardless of type or manufacture.

Appellant agrees that Draginich does appear to merely suggest SIP messaging, but appellant does not agree with the Examiner's interpretation of the call server 22 of Draginich as reading on the enhanced CTI server of the claimed invention. The Draginich call server 22 is simply that, a notoriously well-know call server, and clearly does not provide the enhanced intelligence and functionality of the CTI server of the claimed invention, including conversion of SIP to non-SIP protocols understandable by the CTI server. Appellant argues that simply because Draginich teaches that call server 22 communicates with different telephony protocols does not imply SIP to non-SIP protocol conversion, as in the claimed invention. Call server 22 may have some intelligence common in typical call servers well known in the art, but clearly does not possess the capabilities of the CTI server of the claimed invention, which routes the communication events through intelligence provided by a CTI server of the communications center, characterized in that the reformatting mechanism converts the SIP routing requests into non-SIP protocol understood by the CTI server.

In the method and apparatus of the present invention the SIP request initiated by a caller is parsed in the call center, and then reformatted into language that is understood by the T-server (CTI server in the call center), which then makes routing decisions for the

communication event in its usual way. This allows SIP to be used by a caller to forward a routing request for virtually any transaction, which can then be routed conventionally in the call center. This also eliminates the need to provide a "new" set of routing rules, depending on the type of communication event, and also allows integration of strict routing conventions and SIP functionality without requiring significant modification of or provision of special application program interfaces (APIs) to be distributed to key components of the system, namely servers or switches.

In conclusion, appellant asserts that a proper rejection, under 35 U.S.C. 103, is not supported by the teachings of Draginich, because the claimed limitations, which enable a much more robust and useful system than that taught by the reference provided, are simply not taught.

Appellant also objects to the obviousness argument used by the Examiner, and again this is a common tactic by Examiners, that an addition to what the reference teaches is warranted in a rejection because it would make a better invention. Such motivation is reasonable to support combining features _actually taught_ in the reference, but not to add features, such as routing the communication events through intelligence provided by a _CTI server_ of the communications center, characterized in that the reformatting mechanism converts the SIP routing requests into non-SIP protocol understood by the _CTI server,_ which is clearly not taught in the reference provided.

Appellant therefore strongly believes that claims 16-27 are clearly and unarguably patentable over the prior art relied upon by the Examiner in his current 103(a) rejection of the claims over Draginich. Accordingly, appellant respectfully requests that the Board reverse the Final rejection of claims 16-27 and hold them allowable.

8.   Claims Appendix

The claims involved in the appeal are:

1-15. Canceled

16. A system for routing a communication event in a call center having routing provided by a CTI server, the event initiated by an originator at a computerized workstation outside the call center, comprising:

a software-enabled SIP mechanism operable on the workstation by the originator to prepare and send an SIP-protocol routing request along with an event initiation; and

a software enabled reformatting mechanism in the call center receiving and processing the SIP-protocol routing request;

characterized in that the reformatting mechanism converts the SIP routing request into non-SIP protocol understood by the CTI server, and sends the resulting non-SIP request to the CTI-server for processing and response, and the CTI server determines and returns a routing for the communication event.

17. The system of claim 16 wherein the communication event arrives at the call center from a data packet network.

18. The system of claim 17 wherein the data-packet-network comprises the Internet network.

19. The system of claim 18 wherein the Internet network further connects to a LAN network.

20. The system of claim 16 wherein the CTI server controls routing within the call center.

21. The system of claim 16 wherein the communication events are received from clients of the call center and routed to agents or automated systems at work within the center.

22. A method for routing a communication event in a call center having routing provided by a CTI server, the event initiated by an originator at a computerized workstation outside the call center, comprising the steps of:

a) preparing and sending an SIP-protocol routing request along with the initiated event by a software-enabled SIP mechanism operable on the workstation by the originator;

b) receiving and processing the SIP-protocol routing request by a software enabled reformatting mechanism in the call center;

c) converting the SIP routing request into non-SIP protocol understood by the CTI server by the reformatting mechanism;

d) sending the non-SIP request to the CTI-server for processing and response; and

e) determining a routing for the communication event by the CTI-server.

23. The method of claim 22 wherein the communication event arrives at the call center from a data packet network.

24. The method of claim 23 wherein the data packet network comprises the Internet network.

25. The method of claim 25 wherein the Internet network further connects to a LAN network.

26. The method of claim 22 wherein the CTI server controls routing within the call center.

27. The method of claim 22 wherein the communication events are received from clients of the call center and routed to agents or automated systems at work within the center.

9.   Evidence Appendix

No evidence other than the arguments and facts presented in this brief is provided.
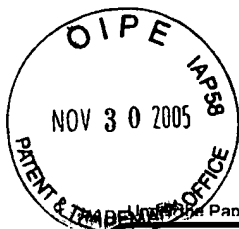

10.   Related Proceedings Appendix

These claims have been previously appealed and related copies are provided herewith.

Respectfully Submitted,
Dan Kikinis

by _____
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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	($)	500.00

Complete if Known	
Application Number	09/927,301
Filing Date	08/10/2001
First Named Inventor	Dan Kikinis
Examiner Name	Justin M. Philpott
Art Unit	2665
Attorney Docket No.	P5064

METHOD OF PAYMENT (check all that apply)

☑ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account   Deposit Account Number: **50-0534**   Deposit Account Name: **Mark A. Boys**

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, **except for the filing fee**

☑ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17

☑ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
Application Type	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fees Paid ($)**
Utility	300	150	500	250	200	100	0
Design	200	100	100	50	130	65	0
Plant	200	100	300	150	160	80	0
Reissue	300	150	500	250	600	300	0
Provisional	200	100	0	0	0	0	0

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
0 - 20 or HP =	0 x	25 =	0

HP = highest number of total claims paid for, if greater than 20

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
0 - 3 or HP =	0 x	100 =	0

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims	
Fee ($)	Fee Paid ($)
0	0

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
- 100 =	0 / 50 =	0 (round up to a whole number) x	125 =	0

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	0
Other: Filing a brief in support of an appeal	500.00

SUBMITTED BY				
Signature	*Donald R. Boys (signature)*	Registration No. (Attorney/Agent)	35,074	Telephone 831-726-1457
Name (Print/Type)	Donald R. Boys			Date 11/30/2005